

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2005/000372

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. 7: C07H 21/02, 21/04; C07K 14/47; A61K 38/17, 48/00; A61P 3/04, 3/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

SEE BELOW UNDER "ELECTRONIC DATA BASE CONSULTED"

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

STN File Dgene: Subsequence search based on SEQ ID 2; STN Files CA, Medline, Wpids, Biosis: Keywords: AGT-121, endophilin, β arrestin, AP2 complex; ANGIS: Subsequence search based on SEQ ID 2

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|------------------------|
| X Y | WO 2003/033513 A1 (AUTOGEN RESEARCH PTY LTD et al) 24 April 2003 Whole Document | 1-7, 9, 12-22 10,11 |
| X | Trevaskis J. L et al, Diabetologia Vol. 46, Supplement 2 (August 2003), 18 th Congress of the International Diabetes Federation, Paris France, August 24-29 2003, International Diabetes Federation, "AGT-121, a novel hypothalamic gene implicated in the development of obesity", p A226-A227 Abstract | 9, 13-17, 21 |
| X | WO 2003/039574 A1 (DEVELOGEN AKTIENGESELLSCHAFT FUR ENTWICKLUNGSBIOLOGISCHE FORSCHUNG) 15 May 2003 Whole Document | 1-6, 8, 9, 12-23 |

☒ Further documents are listed in the continuation of Box C

☒ See patent family annex

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
27 May 2005

Date of mailing of the international search report
- 8 JUN 2005

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| C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|---|--|-----------------------|
| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| X | Farsad K et al, The Journal of Cell Biology, Vol. 155 (2), 15 October 2001, "Generation of high curvature membranes mediated by direct endophilin bilayer interactions", pages 193-200 Whole Document | 1-6, 8, 9 |
| X | WO 2003/031594 A2 (GENOME THERAPEUTICS CORPORATION) 17 April 2003 See especially pages 87, 119, 210 | 1-6, 8, 9, 12-21, 23 |
| X Y | Tang Y et al, PNAS, Vol. 96 (22), 26 October 1999, "Identification of the endophilins (SH3p4/p8/p13) as novel binding partners for the β 1-adrenergic receptor", pages 12559-12564 Whole Document | 1-6, 8 10, 11 |

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Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
 - a. type of material
 - ☒ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material
 - ☒ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing
 - ☒ contained in the international application as filed
 - ☐ filed together with the international application in computer readable form
 - ☐ furnished subsequently to this Authority for the purposes of search
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 1-9, 12-23 (in part)
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
The above claims encompass an indefinite and unsupported range of compounds such that a search covering the full breadth of these claims is not feasible.
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

| Patent Document Cited in Search Report | | | | Patent Family Member | | | |
|---|-------------|----|---------|----------------------|------------|----|------------|
| WO | 2003/033513 | CA | 2463578 | EP | 1446414 | IL | 161294 |
| WO | 2003/039574 | EP | 1441752 | JP | 2005507948 | | |
| WO | 2003/031594 | CA | 2462209 | EP | 1516063 | US | 2004043021 |
| Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001. | | | | | | | |
| END OF ANNEX | | | | | | | |